

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,088	01/03/2002	Michael V. DiBiasio	112025-0483P1	1551
75	590 04/21/2005		EXAM	INER
A. SIDNEY JOHNSTON			HOSSAIN, TANIM M	
	McKENNA, LLP LCON AVENUE		ART UNIT PAPER NUMBER	
BOSTON, MA	02210		2145	
			DATE MAILED: 04/21/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/039,088	DIBIASIO ET AL.	
Office Action Summary	Examiner	Art Unit	
•	Tanim Hossain	2145	
The MAILING DATE of this communication eriod for Reply	appears on the cover sheet	with the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RITHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory properties of the period for reply within the set or extended period for reply will, by so any reply received by the Office later than three months after the elevation of the properties of the propertie	ON. FR 1.136(a). In no event, however, may n. a reply within the statutory minimum of the eriod will apply and will expire SIX (6) Mostatute, cause the application to become	a reply be timely filed nirty (30) days will be considered timely. DNTHS from the mailing date of this communic ABANDONED (35 U.S.C. § 133).	cation.
tatus			
1) Responsive to communication(s) filed on	03 January 2002.		
2a) This action is FINAL . 2b) ⊠	This action is non-final.		
3) Since this application is in condition for all	owance except for formal ma	atters, prosecution as to the meri	ts is
closed in accordance with the practice und	der <i>Ex parte Quayle</i> , 1935 C	.D. 11, 453 O.G. 213.	
isposition of Claims			
4) Claim(s) 1-32 is/are pending in the applica	ation.		
4a) Of the above claim(s) is/are with	ndrawn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-32</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction a	nd/or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exa	miner.		
10)⊠ The drawing(s) filed on <u>03 January 2002</u> is	√are: a) accepted or b)	objected to by the Examiner.	
Applicant may not request that any objection to	the drawing(s) be held in abey	ance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the control of the control	•		
riority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for	reian priority under 35 U.S.C.	& 119(a)-(d) or (f)	
a) All b) Some * c) None of:	organ priority under 00 0.0.0.	, 3 , 10(a) (a) or (i).	
1. Certified copies of the priority document	nents have been received.		
2. Certified copies of the priority docur		Application No	
3. Copies of the certified copies of the			e
application from the International Bu	reau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a	a list of the certified copies no	ot received.	
Attachment(s)	🗖	0 (070 :::0)	
I) ⊠ Notice of References Cited (PTO-892) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948		v Summary (PTO-413) o(s)/Mail Date	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/S	B/08) 5) Notice o	f Informal Patent Application (PTO-152)	
Paper No(s)/Mail Date <u>1/31/03</u> .	6) 🔲 Other: _		

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-24, and 28-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott et al. (U.S. 6,754,181) in view of Elliott et al (U.S. 2004/0022237).

As per claim 1, Elliott Patent (referred to hereon as EP) teaches a network device for use in a computer network carrying network traffic corresponding to sessions, the network device comprising: a traffic scheduler having one or more resources for use in forwarding network traffic received at the device at different rates (paragraph 168); a classification engine configured to identify the received network traffic based upon a predefined criteria (167); and a resource reservation engine in communicating relationship with the traffic scheduler and the classification engine (166). EP does not specifically teach that in response to a request to reserve resources for a first data flow associated with a first session group identifier and belonging to a first session, the resource reservation engine is adapted to direct the traffic scheduler to share resources reserved for one or more second flows, each associated with a respective session group ID, with the first data flow provided that the session group ID matches the session group ID of the one or more second data flows and the one or more second data flows are not sharing resources with a

Art Unit: 2145

third data flow having a session group ID that differs from the first session group ID. Elliott Application (referred to hereon as EA) teaches the sharing of reserved resources, using RSVP, between one source communicating with two different entities, by sharing one communication channel (paragraph 0017). EA also teaches the generation of a session ID for calls (1162). EA does not specifically teach the matching of the session IDs to determine the sharing parameters. as the goal of the "call waiting" is already achieved, without resorting to matching the session IDs. EA does not specifically teach disallowing the switching between one entity and another in the case that a third party is already connected to the source. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the reserving and sharing of resources, using a common channel during call switching, in the event that two entities call the source, into the scheduler, classifier, and reservation engine, as taught by EA into the system of EP. The motivation for doing so lies in the fact that having a shared channel would save bandwidth, allowing for further efficiency. Both inventions are from the same field of endeavor, namely the use of computer networks to facilitate voice communication. It would have been obvious to one of ordinary skill in the art at the time of the invention to identify these calls with a session ID, where calls to the source have the same ID, as many computer communications have a session ID associated with them. It would have been obvious to one of ordinary skill in the art at the time of the invention to limit the switching to situations where the source is not already tied up with more than two communication, as the principle of call waiting in traditional telephony is limited to two instances of communication.

Art Unit: 2145

As per claim 2, EP-EA teaches the network device of claim 1, wherein the resource reservation engine includes a data structure for storing information associated with the data flows (EP: 1020).

As per claim 3, EP-EA teaches the network device of claim 1 wherein the information includes a shared field that indicates a method in which resources are shared (EP: Discussion of Figure 88).

As per claim 4, EP-EA teaches the network device of claim 1, wherein the session group identifier associated with a given data flow includes a source address of an entity sourcing the traffic flow of the given data flow and a resource identifier (EA: 1162).

As per claim 6, EP-EA teaches the network device of claim 1, wherein the first data flow and the one or more second data flows carry voice information (EP: 9).

As per claim 7, EP-EA teaches the network device of claim 1, wherein the first data flow and the one or more second data flows originate from a single sourcing entity (EP: 150).

As per claim 8, EP-EA teaches the network device of claim 1, wherein the first data flow and the one or more second data flows originate from a single sourcing entity and are directed to two or more different destination entities (EA: 0017).

As per claim 9, EP-EA teaches the network device of claim 1, wherein the first data flow and the one or more second data flows carry voice information and correspond to a call waiting context (EP: 1100).

As per claim 10, EP-EA teaches the network device of claim 1, wherein in response to a request to reserve resources for the first data flow that specifies sharing and a set of senders, the resource reservation engine is adapted to direct the traffic scheduler to share resources reserved

Art Unit: 2145

for one or more second data flows that are associated with the set of senders with the first data flow provided that none of the second data flows are sharing resources with a third data flow belonging to a session that is different than the first session (EA: 0017; see also the discussion of claim 1).

As per claim 11, EP-EA teaches the network device of claim 10, but does not specifically teach that the set of senders is an explicit list of senders included in the request. It would have been obvious to one of ordinary skill in the art at the time of the invention to include such a list, as the use of call blocking and allowing in traditional telephony employs this concept.

As per claim 12, EP-EA teaches the network device of claim 10 wherein: the resource reservation engine is adapted to utilize RSVP (EP: 1019); and the request includes a shared object that specifies the Shared Explicit style of sharing (see the discussion of claim 11).

As per claim 13, EP-EA teaches the network device of claim 10, wherein the set of senders includes those senders associated with data flows whose destination address matches a destination address of the first data flow (EP: 1174).

As per claim 14, EP-EA teaches the network device of claim 10, wherein the resource reservation engine is adapted to utilize RSVP (EP: 1019); and the request includes a shared object that specifies the Wildcard Filter style of sharing (EP: 1174).

Claim 15 is rejected on the same basis as claim 1.

Claims 16, 17, 18, and 19 are rejected on the same bases as claims 11-14 respectively.

Claim 20 is rejected on the same basis as claim 1.

As per claim 21, EP-EA teaches the method of claim 20 further comprising the step of: storing the session group ID of the first resource reservation message (EA: 1162).

Application/Control Number: 10/039,088

Art Unit: 2145

As per claim 22, EP-EA does not specifically teach the storage of the group ID in a data structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as storage of identification is common in the art.

As per claim 23, EP-EA teaches the method of claim 22, wherein the data structure is a table (EP: 29).

As per claim 24, EP-EA teaches the method of claim 20, wherein the session group identifier associated with a given data flow includes a source address of an entity sourcing the traffic flow and a resource ID (EP: 29).

Claim 28 is rejected on the same basis as claim 1.

Claims 29-31 are rejected on the same bases as claim 21-23.

As per claim 32, EP-EA teaches a computer readable medium comprising computer executable instructions for performing the method recited in claims 20, 21, 28, 29 (EP: 3263).

Claims 5, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott et al. (U.S. 6,754,181) in view of Elliott et al (U.S. 2004/0022237), in further view of Jappila (RSVP document).

As per claim 5, EP-EA teaches the network device of claim 1, wherein the resource reservation engine utilizes the RSVP specification standard (EP: 1019). EP-EA does not specifically teach that the session group ID of a given data flow is contained in a RSVP path message associated with the given data flow. Jappila teaches the use of source identification in the RSVP path message. It would have been obvious to one of ordinary skill in the art at the

Application/Control Number: 10/039,088

Art Unit: 2145

Page 7

time of the invention to include the ID in a path message, as this a component of the RSVP

standard, and EP-EA uses the RSVP standard.

Claims 25 and 26 are rejected on the same basis as claim 5.

As per claim 27, EP-EA teaches the method of claim 20, but does not specifically teach

that the second resource reservation message is an RSVP Resv message. Jappila teaches the use

of a Resv message. It would have been obvious to one of ordinary skill in the art at the time of

the invention to include a Resv message, as this a component of the RSVP standard, and EP-EA

uses the RSVP standard.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The

examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Valencia Martin-Wallace can be reached on 571/272-6159. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VALENCIA MARTIN-WALLACE SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3700

Application/Control Number: 10/039,088

Art Unit: 2145

Tanim Hossain Patent Examiner Art Unit 2145 Page 8